

SEQUENCE LISTING

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YEH, EDWARD T.H.

<120> METHODS AND COMPOSITIONS RELATING TO FORTILIN, AN
ANTI-APOPTOTIC MOLECULE, AND MODULATORS OF FORTILIN

<130> UTSH:251US

<140> UNKNOWN

<141> 2001-10-30

<140> 60/244,416

<141> 2000-10-30

<160> 9

<170> PatentIn Ver. 2.1

<210> 1

<211> 830

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (95)..(613)

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Met Ile Ile Tyr Arg Asp Leu

1

5

atc agc cac gat gag atg ttc tcc gac atc tac aag atc cgg gag atc 163

Ile Ser His Asp Glu Met Phe Ser Asp Ile Tyr Lys Ile Arg Glu Ile

10

15

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gcg gac ggg ttg tgc ctg gag gtg gag ggg aag atg gtc agt agg aca 211

Ala Asp Gly Leu Cys Leu Glu Val Glu Gly Lys Met Val Ser Arg Thr

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35

gaa ggt aac att gat gac tcg ctc att ggt gga aat gcc tcc gct gaa 259

Glu Gly Asn Ile Asp Asp Ser Leu Ile Gly Gly Asn Ala Ser Ala Glu

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ggc ccc gag ggc gaa ggt acc gaa agc aca gta atc act ggt gtc gat 307

Gly Pro Glu Gly Glu Gly Thr Glu Ser Thr Val Ile Thr Gly Val Asp

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70

att gtc atg aac cat cac ctg cag gaa aca agt ttc aca aaa gaa gcc 355

Ile Val Met Asn His His Leu Gln Glu Thr Ser Phe Thr Lys Glu Ala

75

80

85

tac aag aag tac atc aaa gat tac atg aaa tca atc aaa ggg aaa ctt	403
Tyr Lys Lys Tyr Ile Lys Asp Tyr Met Lys Ser Ile Lys Gly Lys Leu	
90 95 100	

gaa gaa cag aga cca gaa aga gta aaa cct ttt atg aca ggg gct gca	451
Glu Glu Gln Arg Pro Glu Arg Val Lys Pro Phe Met Thr Gly Ala Ala	
105 110 115	

gaa caa atc aag cac atc ctt gct aat ttc aaa aac tac cag ttc ttt	499
Glu Gln Ile Lys His Ile Leu Ala Asn Phe Lys Asn Tyr Gln Phe Phe	
120 125 130 135	

att ggt gaa aac atg aat cca gat ggc atg gtt gct cta ttg gac tac	547
Ile Gly Glu Asn Met Asn Pro Asp Gly Met Val Ala Leu Leu Asp Tyr	
140 145 150	

cgt gag gat ggt gtg acc cca tat atg att ttc ttt aag gat ggt tta	595
Arg Glu Asp Gly Val Thr Pro Tyr Met Ile Phe Phe Lys Asp Gly Leu	
155 160 165	

gaa atg gaa aaa tgt taa caaatgtggc aattattttg gatctatcac	643
Glu Met Glu Lys Cys	
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ctgtcatcat aactggcttc tgcttgtcat ccacacaaca ccaggactta agacaaatgg	703
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gactgatgtc atcttgagct cttcatttat tttgactgtg atttatttgg agtggaggca	763
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ttgagag	830
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<210> 2
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 <212> PRT
 <213> Homo sapiens

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Ile Tyr Lys Ile Arg Glu Ile Ala Asp Gly Leu Cys Leu Glu Val Glu	
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Gly Lys Met Val Ser Arg Thr Glu Gly Asn Ile Asp Asp Ser Leu Ile	
35 40 45	
Gly Gly Asn Ala Ser Ala Glu Gly Pro Glu Gly Glu Gly Thr Glu Ser	
50 55 60	
Thr Val Ile Thr Gly Val Asp Ile Val Met Asn His His Leu Gln Glu	
65 70 75 80	
Thr Ser Phe Thr Lys Glu Ala Tyr Lys Lys Tyr Ile Lys Asp Tyr Met	
85 90 95	
Lys Ser Ile Lys Gly Lys Leu Glu Glu Gln Arg Pro Glu Arg Val Lys	
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Pro Phe Met Thr Gly Ala Ala Glu Gln Ile Lys His Ile Leu Ala Asn	

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Gly Gly Asn Ala Ser Ala Glu Gly Pro Glu Gly Glu Gly Thr Glu Ser
50 55 60

Thr Ser Phe Thr Lys Glu Ala Tyr Lys Lys Tyr Ile Lys Asp Tyr Met
85 90 95

Pro Phe Met Thr Gly Ala Ala Glu Gln Ile Lys His Ile Leu Ala Asn
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Met Val Ala Leu Leu Asp Tyr Arg Glu Asp Gly Val Thr Pro Phe Met
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Gly Lys Met Val Ser Arg Thr Glu Gly Ala Ile Asp Asp Ser Leu Ile
35 40 45

Gly Gly Asn Ala Ser Ala Glu Gly Pro Glu Gly Glu Gly Thr Glu Ser
50 55 60

Thr Val Val Thr Gly Val Asp Ile Val Met Asn His His Leu Gln Glu
65 70 75 80

Thr Ser Phe Thr Lys Glu Ala Tyr Lys Lys Tyr Ile Lys Asp Tyr Met
85 90 95

Lys Ser Leu Lys Gly Lys Leu Glu Glu Gln Lys Pro Glu Arg Val Lys
100 105 110

Pro Phe Met Thr Gly Ala Ala Glu Gln Ile Lys His Ile Leu Ala Asn
115 120 125

Phe Asn Asn Tyr Gln Phe Phe Ile Gly Glu Asn Met Asn Pro Asp Gly
130 135 140

Met Val Ala Leu Leu Asp Tyr Arg Glu Asp Gly Val Thr Pro Phe Met
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<211> 172

<212> PRT

<213> Chicken

<400> 5

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Gly Lys Met Val Thr Arg Thr Glu Gly Gln Ile Asp Asp Ser Leu Ile
35 40 45

Gly Gly Asn Ala Ser Ala Glu Gly Pro Glu Gly Glu Gly Thr Glu Ala
50 55 60

Thr Val Ile Thr Gly Val Asp Ile Val Ile Asn His His Leu Gln Glu
65 70 75 80

Thr Ser Phe Thr Lys Glu Ser Tyr Lys Lys Tyr Ile Lys Asp Tyr Met
 85 90 95
 Lys Ala Ile Lys Ala Arg Leu Glu Glu His Lys Pro Glu Arg Val Lys
 100 105 110
 Pro Phe Met Thr Gly Ala Ala Glu Gln Ile Lys His Ile Leu Ala Asn
 115 120 125
 Phe Lys Asn Tyr Gln Phe Phe Ile Gly Glu Asn Met Asn Pro Asp Gly
 130 135 140
 Met Val Ala Leu Leu Asp Phe Arg Glu Asp Gly Val Thr Pro Tyr Met
 145 150 155 160
 Ile Phe Phe Lys Asp Gly Leu Glu Ile Glu Lys Cys
 165 170

<210> 6

<211> 172

<212> PRT

<213> D. Melanogaster

<400> 6

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 20 25 30
 Lys Leu Ile Thr Arg Gln Gly Asp Asp Ile Lys Leu Glu Gly Ala Asn
 35 40 45
 Ala Ser Ala Glu Glu Ala Asp Glu Gly Thr Asp Ile Thr Ser Glu Ser
 50 55 60
 Gly Val Asp Val Val Leu Asn His Arg Leu Thr Glu Cys Phe Ala Phe
 65 70 75 80
 Gly Asp Lys Lys Ser Tyr Thr Leu Tyr Leu Lys Asp Tyr Met Lys Lys
 85 90 95
 Val Leu Ala Lys Leu Glu Glu Lys Ser Pro Asp Gln Val Asp Ile Phe
 100 105 110
 Lys Thr Asn Met Asn Lys Ala Met Lys Asp Ile Leu Gly Arg Phe Lys
 115 120 125
 Glu Leu Gln Phe Phe Thr Gly Glu Ser Met Asp Cys Asp Gly Met Val
 130 135 140
 Ala Leu Val Glu Tyr Arg Glu Ile Asn Gly Asp Ser Val Pro Val Leu
 145 150 155 160

Met Phe Phe Lys His Gly Leu Glu Glu Glu Lys Cys
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<210> 7
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 <212> PRT
 <213> C. ELEGANS

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 20 25 30
 Lys His Val Val Arg Lys Glu Gly Glu Ile Val Leu Ala Gly Ser Asn
 35 40 45
 Pro Ser Ala Glu Glu Gly Ala Glu Asp Asp Gly Ser Asp Glu His Val
 50 55 60
 Glu Arg Gly Ile Asp Ile Val Leu Asn His Lys Leu Val Glu Met Asn
 65 70 75 80
 Cys Tyr Glu Asp Ala Ser Met Phe Lys Ala Tyr Ile Lys Lys Phe Met
 85 90 95
 Lys Asn Val Ile Asp His Met Glu Lys Asn Asn Arg Asp Lys Ala Asp
 100 105 110
 Val Asp Ala Phe Lys Lys Lys Ile Gln Gly Trp Val Val Ser Leu Leu
 115 120 125
 Ala Lys Asp Arg Phe Lys Asn Leu Ala Phe Phe Ile Gly Glu Arg Ala
 130 135 140
 Ala Glu Gly Ala Glu Asn Gly Gln Val Ala Ile Ile Glu Tyr Arg Asp
 145 150 155 160
 Val Asp Gly Thr Glu Val Pro Thr Leu Met Leu Val Lys Glu Ala Ile
 165 170 175
 Ile Glu Glu Lys Cys
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 <212> PRT
 <213> S. Cerevisiae

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Ala Met Val Asn Val Gly Gly Asp Asn Ile Asp Ile Gly Ala Asn Pro	35	40	45
Ser Ala Glu Gly Gly Asp Asp Asp Val Glu Glu Gly Ala Glu Met Val	50	55	60
Asn Asn Val Val His Ser Phe Arg Leu Gln Gln Thr Ala Phe Asp Lys	65	70	75
Lys Ser Phe Leu Thr Tyr Ile Lys Gly Tyr Met Lys Ala Val Lys Ala	85	90	95
Lys Leu Gln Glu Thr Asn Pro Glu Glu Val Pro Lys Phe Glu Lys Gly	100	105	110
Ala Gln Thr Tyr Val Lys Lys Val Ile Gly Ser Phe Lys Asp Trp Glu	115	120	125
Phe Phe Thr Gly Glu Ser Met Asp Pro Asp Ala Met Val Val Met Leu	130	135	140
Asn Tyr Arg Glu Asp Gly Thr Thr Pro Phe Val Ala Ile Trp Lys His	145	150	155
Gly Ile Val Glu Glu Lys	165		

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 <212> PRT
 <213> RICE

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 Ser Phe Pro Tyr Arg Glu Ile Glu Asn Gly Ile Leu Trp Glu Val Asp
 20 25 30
 Gly Lys Trp Val Val Gln Gly Ala Ile Asp Val Asp Ile Gly Ala Asn
 35 40 45
 Pro Ser Ala Glu Gly Gly Gly Asp Asp Glu Gly Val Asp Asp Gln Ala
 50 55 60
 Val Lys Val Val Asp Ile Val Asp Thr Phe Arg Leu Gln Glu Gln Pro
 65 70 75 80
 Pro Phe Asp Lys Lys Gln Phe Val Thr Phe Met Lys Arg Tyr Ile Lys

95

His Gly Leu Lys Glu Val Lys Cys
165